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NEW INFORMATION ON THE DISTRIBUTION OF BIRDS OF SOUTH-WESTERN AUSTRALIA

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The following observations extend the known range and add to the distributional knowledge of some birds of South-Western Australia as listed by D. L. Serventy and H. M. Whittell in their *Birds of Western Australia* (1962, 3rd edn.). Certain ecological factors influencing the distribution of these birds are discussed where pertinent.

Purpureicephalus spurius. Red-capped Parrot.

Over most of its range including towards its northern limit, this species is associated with the marri, *Eucalyptus calophylla* (A. Robinson, *W. Aust. Nat.*, 7, 1960: 109) and although this tree forms dense forest to as far north as Dandaragan, the parrot has not been reported in literature north of Gingin. However, Mr. C. L. E. Orton informed me (*pers. comm.* June 15, 1964) that on several occasions in the 1930s he found the King Parrot nesting in hollow limbs of marri gums at Dandaragan.

Calyptorhynchus banksii. Red-tailed Black Cockatoo.

In the Darling Range jarrah forest belt between Armadale and Collie, this species is present in small numbers for the period between October and June inclusive, and possibly for the whole year although it seems that a post-breeding migratory movement northwards in the late spring and early summer and a return movement southwards in the autumn are undertaken in the Darling Range analogous to the movements made by the White-tailed Black Cockatoo, *C. baudinii*, on the Swan coastal plain. Observations illustrating the frequency of occurrence are set out in chronological order: 7

along the Wongong Brook on October 7, 1956; 6 along the Wongong Brook on January 2, 1956; 30 along the Wongong Brook on January 6, 1956; 40-50 in small flocks along the Wongong Brook on May 23, 1959; 5 about three miles east of Jarrahdale on June 5, 1960; small flocks along the Serpentine River, upstream from the dam, on June 6, 1960; 6 near the confluence of the Hotham and Williams Rivers on November 19, 1960; over 6 about two miles south-east of Jarrahdale on November 20, 1960; 4 along the Wongong Brook on April 16, 1961; and flocks of 4 and 5 at Willowdale on October 1, 1961.

Cacatua tenuirostris. Long-billed Corella.

In former times this Corella was widely distributed throughout the South-West but suffered a marked decline (T. Carter, 1912, *The Ibis*, 1912: 627), its main area of occurrence at present being between Moora, Kalannie, Geraldton and Jurien Bay, although small colonies survive in the lower South-West at Lake Muir and parts of the Darling Range.

More precise information on the present limits of the range of the species is required. I have seen the Long-billed Corella at the following localities: 20 at Winehester on October 20, 1959; large flocks of several hundred at the wheat silos at Carnamah on several occasions; ca. 1,000 about eight miles north-west of Dandaragan on March 27, 1959; ca. 200 at the lower Coekleshell Gully on March 27, 1959; and 4 about 14 miles south of Dandaragan on March 31, 1964. The last locality is in marri woodland and coincides approximately with the southern limit of the northern population between Dandaragan and Regan's Ford.

Ninox connivens. Barking Owl.

G. F Mees (*W. Aust. Nat.*, 8, 1963: 166) has referred to the rarity of this species in South-western Australia and was only able to list seven localities where it has been observed. I. C. Carnaby, P. J. Fuller and I heard a bird uttering the characteristic double-noted bark-like calls on the night of July 1, 1962, in york gum, *Eucalyptus loxophleba*, woodland, about 2 miles east of Wubin.

Dacelo gigas. Laughing Kookaburra.

It has been implied by Serventy and Whittell (*loc. cit.*) that a gap in the distribution of the Kookaburra exists between Dongara and Jurien Bay and that the species has been independently introduced to the Mingenew and Irwin districts. However, I have seen the species in flooded gums, *Eucalyptus rudis camaldulensis*, at Coekleshell Gully (first recorded on March 27, 1959), at Stockyard Gully (first recorded on January 5, 1960), and at Arramel (first seen on January 3, 1960), indicating that it occurs in this coastal strip wherever the habitat is suitable. Thus the possibility that the Kookaburra spread northwards along this coastal strip to the Irwin River cannot be excluded.

Cheramoeca leucosternum. White-backed Swallow.

From 1957 to 1964, nesting tunnels of this species were found in banks along the main road between Guilderton and Yancheop to

within a few miles north of the latter. It is a common bird of the coastal plain north of Yanchev where it nests in banks produced by wind erosion and during road constructions in the low heath vegetated sand dunes (J. Ford, *W. Aust. Nat.*, 6, 1957: 82).

Stipiturus malachurus. Southern Emu-Wren.

This is one of several Bassian bird-species of the South-West which has a coastal and inland distribution while avoiding the heavy forest belt. Along the extreme south coast between Cheyne Beach and Augusta it is particularly abundant in dense low heath scrub of the coastal dunes but is not known to penetrate any appreciable distance northwards into the forest block. On January 3, 1962, however, I saw a party of emu-wrens in thick low vegetation of the swampy margins of a small stream in jarrah, *Eucalyptus marginata*, forest about 30 miles N.W. of Walpole.

From 1957 to 1964 during a survey of the coastal strip between Perth and Kalbarri I observed the Southern Emu-Wren in dense scrub growing in the coastal dune valleys at the mouth of the Moore River; at Lancelin; opposite the Green Islets; between Ronsard Bay and the mouth of the Hill River, and opposite Sandland Island. It appears to be common in the dense low heath scrub on the slopes of the laterite hills near Mt. Lesueur (refer locality map, *W. Aust. Nat.*, 8: 136).

On April 8, 1960, in a dense thicket of *Acacia cyanophylla*, 3 miles south of Lancelin, a male and female of the subspecies *media* were collected. These specimens are distinctly paler than birds of the subspecies *westernensis* of the more humid parts of the South-West, particularly in the streakings on the head and back, are much less rufous, and are of slightly smaller dimensions. Compared with the race *hartogi* on Dirk Hartog Island, the Lancelin birds are much larger but only slightly darker. The Southern Emu-Wren is thus another species of the South-West in which there is a concentric cline in colour variation, and a north-south cline in size, the clines being correlated with the climatic gradients of humidity and temperature in accordance with Gloger's and Bergmann's Rules respectively (cf. J. Ford, *The Emu*, 62, 1963: 241).

Acanthiza inornata. Western Thornbill.

On March 27, 1964, Dr. G. M. Storr and I found the Western Thornbill to be of common occurrence in marri woodland fringing the lower Hill River and the lower Cockleshell Gully, and all tributaries of these watercourses in the laterite breakaway country near Mt. Lesueur and Mt. Peron. We also observed at Cockleshell Gully, in the vicinity of the homestead, two other Bassian species which usually do not occur any further north, viz. the Western Spinebill Honeyeater, *Acanthorhynchus superciliosus*, in *Banksia menziesii*—*Eucalyptus tottiana* sandplain country, and the Scarlet Robin, *Petroica multicolor*, in the marri woodland along the gully. I have also seen the latter species along the lower Hill River, and the Western Spinebill is not uncommon on the coastal plain, a few miles inland of Jurien Bay.

At Stoekyard Gully, about 10 miles north of Coekleshell Gully, the Red-eapped Robin, *Petroiea goodenovii*, replaees the Searlet Robin, and I have never seen the Western Spinbill at this locality nor at Three Springs near the eoast despite there being dense belts of *Banksia* serub mainly *B. prionotes*. The marri, which the Western Thornbill and Searlet Robin mainly inhabit in the extreme northern parts of their ranges, does not ooeur any further north than Coekleshell Gully and its tributaries. On the north bank of Ellendale Pool on the Greenough River there are three large marris which appear to constitute a natural isolate but in faet the trees were planted there some 80 years ago.

Dasyornis brachypterus. Bristle-bird.

First diseovered at Two People Bay in February 1945 (K. G. Buller, *The Emu*, 45, 1945: 78), the Bristle-bird was relocated at this locality by E. H. Sedgwick on January 1, 1961 (*W. Aust. Nat.*, 7: 208) and independently by me on January 24, 1961, when a speeimen was eolleeted. From Mareh 4-6, 1961, the range of the speeies was extended to the south side of Lake Gardner and Moates Lagoon, and the northern slopes of Mt. Gardner. Then on April 2-3, 1961, Dr. G. F. Mees and I diseovered the speeies along the swampy margins of the Wayehinieup River just upstream from the bridge near the mouth, when several birds were seen and heard in the low swamp-land heath. It probably also ooeurs over most of Mt. Many Peaks sinee on Deeember 1, 1962, a bird was heard singing on the northern slopes when I. C. Carnaby and I visited the area during a period of inelement weather which unfortunately adversely affected birds generally and made them diffieult to loeate.

Although the Bristle-bird frequently ooeurs in the same habitat as the Noisy Serub-bird, *Atrichornis elamosus*, at Two People Bay, it prefers the margins of swamp heath and the dune valleys where the vegetation is only a few feet high. Sword grass, *Lepidosperma gladiatum* and *angustatum*, and saw grass, *Gahnia trifida*, are eommon elements of its habitat which is usually overgrown with an entanglement of dodder, *Cassytha racemosa*, and invariably has a thiek undergrowth of bent grass, *Agrostis acemula*, mat grass, *Hemarthria uncinata*, spear grass, *Diplopogon setaeus*, and rushes which often include *Anarthria prolifera*, *Hypolaena graeillima*, *H. fasciculata* and *Loxoerya flexuosa*. Where the low heath serub is more open in the well drained areas, the Field Wren, *Calamanthus fuliginosus montanellus*, replaees the Bristle-bird both at Two People Bay and the Wayehinieup River-Mt. Many Peaks area.

Seisura inquieta. Restless Flycatcher.

This speeies is now rare on the eoastal plain north of Perth but penetrates onto it along the Moore River from the forest eountry to the east where it ooeurs around swamps. I observed it in the flooded gums and paper-barks, *Melaleuca parviflora*, fringing the Moore River at Regan's Ford on May 3, 1958 (see W. H. Loaring and D. L. Serventy, *W. Aust. Nat.*, 3, 1952: 111), and at Barramber on Mareh 2, 1959.

On May 30, 1965, I saw a bird in a patch of weeping willows at Coolbellup (=North) Lake, 6 miles south of Perth. The species is an uncommon visitor to near Perth (D. L. Serventy, *Emu*, 47, 1948: 276).

Pachycephala pectoralis. Golden Whistler.

On April 22, 1962, during a brief stop on the Geraldton-Carnarvon highway, I saw a male Golden Whistler in sandplain country vegetated with thick scrub consisting of *Banksia*, *Acacia*, *Melaleuca* and stunted *Eucalyptus*, about 40 miles north of the Murchison River bridge.

During a field trip to the eastern goldfields in May 1964, the Golden Whistler was recorded at two localities east and north of its known range. On May 18, 1964, a female whistler was collected in dense wattle scrub, *Acacia quadrimarginea*, on the west side of Lake Cowan, 2 miles east of Eundyne, near Higginsville. A pair including a male in full adult plumage, which was subsequently collected, was later observed in the same habitat about one mile east of Eundyne. The only pair of Grey Fantails, *Rhipidura fuliginosa*, seen in this area, was with the pair of whistlers in the wattle scrub. At Spargoville, 23 miles south of Coolgardie, a female Golden Whistler was seen in the understory scrub of dense *Eucalyptus* forest on May 22, 1964.

Further investigations may possibly reveal that in suitable habitat the Golden Whistler ranges inland to the mulga-eucalypt line.

Pachycephala inornata. Gilbert Whistler.

In September 1953, near the Northam rifle range, I saw a pair of whistlers which I am almost certain was *P. inornata*. Because they were very wary and difficult to observe in the scrub habitat, no detailed description of their plumage was taken, but it was noted that their calls were distinctly different to those of *P. pectoralis* and *P. rufiventris*, both of which species occur in the area.

Climacteris rufa. Rufous Tree-creeper

Serventy and Whittell (*loc. cit.*) state that the Rufous Tree-creeper, an inhabitant of *Eucalyptus* woodland, and the White-browed Tree-creeper, *Climacteris affinis*, an inhabitant of mulga vegetation, overlap geographically in the eastern goldfields but are usually exclusive of one another in any one area. Whilst at Callion, 70 miles north of Coolgardie, on May 12, 1964, I heard and saw a Rufous Tree-creeper in a salmon gum, *Eucalyptus salmonophloia*, and only a few yards away in a patch of mulga, *Acacia aneura*, along a watercourse, a male White-browed Tree-creeper which was subsequently collected. It thus appeared that there was no significant ecological overlap between the two treecreepers in that each was confined to its preferred habitat in the region of geographical contact. A few moments later, however, I observed the female White-browed Tree-creeper busily engaged in searching for food under the bark of a tall merrit, *Eucalyptus stocktoniae*.

The authors of *Birds of Western Australia* consider that the jarrah-karri heavy forest belt constitutes the headquarters of the

Rufous Tree-creeper in South-western Australia. In the jarrah forest of the Darling Range east of Perth it has supposedly undergone an eclipse in abundance and is now definitely rare (D. L. Serventy, 1948, *The Emu*, 47: 282). Since September 6, 1959, I have noted an occasional pair along the Wongong Brook, east of Byford, and also in the vicinity of the Serpentine Dam and near Willowdale to the south. Inland and east of the Darling Range jarrah belt, however, I have found the species to be numerous at several localities, viz. in wandoo, *Eucalyptus wandoo*, savannah at the 42-mile peg on the Perth-York road; in wandoo-jarra-marri forest at the confluence of the Hotham and Williams Rivers; in gimlet, *Eucalyptus salubris*, woodland 26 miles S.S.E. of Doodlakine; and in morrell, *Eucalyptus oleosa longicornis*, woodland between Yellowdine and Parker Range.

It is also interesting to note that in wandoo forest at the 42-mile peg on the York road, Dr. G. F. Mees and I observed the Western Shrike-Tit, *Falcunculus frontatus leucogaster*, on November 29, 1959, and February 19, 1961.

Myzomela nigra. Black Honeyeater.

Dr. G. M. Storr and I saw two pairs of the Black Honeyeater in the vicinity of Arrowsmith Lake, 5 miles inland from Cliff Head, on March 29, 1964, during the peak of the flowering of the illyarrie, *Eucalyptus erythrocorys*, which appeared to be the source of attraction. There was probably a small influx to the area. The Brown Honeyeater, *Lichmera indistincta*, was very common at the time.

Melithreptus brevirostris. Brown-headed Honeyeater.

A flock of several birds was seen feeding on *Eucalyptus* blossom in the stony hills at Eundyne on May 20, 1964. Two days later this species was found to be abundantly plentiful at Spargoville where it had been attracted by the profusion of blossom of several *Eucalyptus* species. The White-eared Honeyeater, *Meliphaga leucotis*, White-fronted Honeyeater, *Phylidonyris albifrons*, Brown Honeyeater, *Lichmera indistincta*, and Purple-crowned Lorikeet, *Glossopsitta porphyrocephala*, all nectar feeders, were also common. Because the Brown-headed Honeyeater is nomadic over the more inland parts of its range following the flowering of the *Eucalyptus* species, it probably ranges inland to the mulga-eucalypt line.

Meliphaga ornata. Yellow-plumed Honeyeater.

The recorded limits of this species in South-western Australia are Kalbarri, Yandanooka, Bullfinch and Dundas (Serventy and Whittell, *loc. cit.*) although it is suggested that probably the species is distributed to the mulga-eucalypt line. Recent observations have confirmed this view. P. Slater and E. Lindgren (*W. Aust. Nat.*, 5, 1955: 16) found it to be common in mallee at Queen Victoria Spring, and I found it to be common in salmon gum woodland at Coolgardie on December 19-29, 1960, at Callion on May 12-15, 1964, at Eundyne and Higginsville on May 17-21, 1964, and at Spargoville on May 22, 1964. The White-eared Honeyeater and Brown Honeyeater were also seen at Callion.